



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/682,389	08/29/2001	Jeffrey Wayne Eberhard	RD-24939	5687
6147 7590 11/19/2003 GENERAL ELECTRIC COMPANY GLOBAL RESEARCH CENTER PATENT DOCKET RM. 4A59 PO BOX 8, BLDG. K-1 ROSS NISKAYUNA, NY 12309			EXAMINER MORAN, TIMOTHY J	
			ART UNIT 2878	PAPER NUMBER

DATE MAILED: 11/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/682,389	EBERHARD ET AL.	
	Examiner	Art Unit	
	Timothy J. Moran	2878	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 11-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 3,4,7,8,12-14,16 and 17 is/are allowed.
- 6) ☒ Claim(s) 1,2,5,6,11,18 and 19 is/are rejected.
- 7) ☒ Claim(s) 15 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
 a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

Claim 15 is objected to because of the following informalities: In line 5, the term "scinillator" should be replaced with --scintillator--. Appropriate correction is required.

Claim 18 is objected to because of the following informalities: In line 4, the term "scinillator" should be replaced with --scintillator--. Appropriate correction is required.

Claim Rejections - 35 USC § 102

Claims 1, 2, 5, 11, and 18-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Weisfield, U. S. Patent No. 6,348,693. Regarding claim 1, Weisfield describes a radiation imaging system comprising a scintillator (500, col. 3, lines 1-8), an imaging array (200), and a lamination layer (400) comprising benzocyclobutene (col. 3, lines 37-41).

Regarding claim 2, the barrier layer of Weisfield is understood to comprise at least 99% of lamination material.

Regarding claims 5 and 19, the barrier layer of Weisfield is understood to provide moisture protection.

Regarding claim 11, Weisfield teaches the use of a lamination layer thickness of 1.5 to 10 microns (col. 3, lines 49-57).

Regarding claim 18, the barrier layer of Weisfield is understood to comprise at least 99% of lamination material.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Weisfield as applied to claim 1 above, and further in view of Kingsley, U. S. Patent No. 5,179,284. Weisfield does not describe the use of a reflective scintillator surface opposite the imager array. However, Kingsley teaches that such an arrangement (col. 2, lines 55-63) has the advantage of maximizing detector signal (col. 3, line 60-col. 4, line 8). Therefore it would have been obvious to one of ordinary skill in the art to provide such a reflective scintillator surface in the system of Weisfield for the advantage of maximizing signal.

Allowable Subject Matter

Claims 3-4, 7-8, and 12-17 are allowed.

The following is a statement of reasons for the indication of allowable subject matter: Claims 12 and 15 include limitations that a lamination layer in a scintillator-based imager comprises an optical absorbing material of the mentioned types is disposed between a scintillator and an imager array. Note that claims 1 and 18 and their dependent claims would be allowable if rewritten so that the lamination material consists only of plasticized polyetherimide thermoplastic polymers of the types specified in the claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kingsley, U. S. Patent No. 5,187,369 describes a radiation imaging system comprising a lamination layer (92) disposed between a scintillator and an imager array comprising polyetherimide polymers (col. 7, lines 12-30).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy J. Moran whose telephone number is 703-305-0849. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Porta can be reached on 703-308-4852. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9318.

Application/Control Number: 09/682,389
Art Unit: 2878

Page 5

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

T.M.

TM
November 13, 2003

*Constantine
HANNAHER*
CONSTANTINE HANNAHER
PRIMARY EXAMINER
GROUP ART UNIT 2878